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Agenda ID#4099

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

CONSUMER PROTECTION AND SAFETY DIVISION
SAFETY AND RELIABILITY BRANCH

RESOLUTION SU-55
DATE: DECEMBER 16, 2004

RESOLUTION

RESOLUTION SU-55, ORDER GRANTING
PACIFIC GAS AND ELECTRIC COMPANY
A DEVIATION FROM TITLE 49 CODE OF
FEDERAL REGULATIONS 192.611 AS ADOPTED
UNDER GENERAL ORDER 112E, RULE 101.2.

SUMMARY

1. Pacific Gas and Electric Company (PG&E) petitions the Commission to authorize a deviation from General Order (G.O.) 112E, Natural Gas Safety Standards, Rule 101.2, for a portion of its natural gas transmission pipelines.
2. G.O. 112E, Rule 101.2 incorporates United States Department of Transportation (DOT) regulations contained in Title 49, Code of Federal Regulations, Part 192 (49 CFR 192). The waiver is sought under G.O. 112E, Rule 101.3, and is subject to the requirements of Section 3(e) of the Natural Gas Pipeline Safety Act of 1968.
3. DOT regulations require a gas pipeline operator to complete a class location change study whenever it believes an increase in population density near pipelines may have caused a change in class location. If a new, higher class location is confirmed, the operator is required to verify that its pipeline pressure corresponds to the new class location requirement. If not, the operator must either reduce pressure or replace the pipe.
4. PG&E requests a deviation for a 0.91-mile section of its transmission line 401 (L-401) in the city of Tracy, where the class location has increased due to the development of a youth sports facility near PG&E's pipeline.
5. The deviation would allow PG&E to perform alternative risk control activities in lieu of pressure reduction or pipeline segment replacement based on DOT regulations. The SRB believes that a higher level of safety will be achieved.
6. This resolution grants PG&E's class location waiver request. The waiver essentially authorizes a deviation from DOT regulations to lower the pressure or replace the portion of the pipeline.

BACKGROUND

PG&E has requested a waiver from 49 CFR § 192.611, “Change in class location: Confirmation or revision of maximum allowable operating pressure” (MAOP) for a section of its L-401, located in Tracy between Mile Posts (MPs) 325.44 and 326.35. The city of Tracy is planning to build an outdoor Youth Sports Facility (sports facility) which will change the class location from Class 1 to Class 3 after it is completed. Class location is an important parameter, which categorizes locations based on population densities along natural gas pipelines. There are four Class locations numbered from 1 to 4. Class location 1 has the lowest population density; class location 4 has the highest population density.

Section § 192.611 “Change in class location: Confirmation or revision of maximum allowable operating pressure” requires that in class 3 locations, the MAOP of the gas transmission pipeline shall be 0.667 times the test pressure. The affected pipeline section of L-401 does not meet this requirement. Therefore, PG&E is required to either reduce the MAOP and operate the pipeline accordingly, or replace the pipeline segment with a thicker wall pipe to lower pipe wall stress to acceptable percentages of specified minimum yield strength (SMYS).

PG&E stated that reducing pressure is not an option due to higher capacity requirements, which necessitate more gas usage. Thus, PG&E has applied for a Waiver from the requirements of Section § 192.611. In exchange for the requested Waiver, PG&E would perform alternative risk control activities to achieve a higher level of safety in lieu of pressure reduction or pipeline segment replacement.

DOT has established guidelines for the consideration of requests for waivers of 49 CFR § 192.611, to confirm or revise the MAOP of a natural gas pipeline after a change in class location has occurred (“Class location waiver”). DOT recognizes the safety benefits of granting class location waivers, even though current regulations require that pipelines in the higher populated areas operate at lower stress levels to provide an extra safety margin in those areas.

The City of Tracy held a public meeting in early 2004. In attendance were local officials including the Mayor, the public, and the representatives from PG&E. PG&E presented an overview of its pipelines and safety impact to the residents. There were no oppositions to PG&E’s safety plan from the government officials or the residents.

NOTICE

Notice of the waiver application was made by PG&E via written communication to the potentially affected parties.

PROTEST

No protest of the waiver application has been filed with the Commission.

DISCUSSION

The staff of Consumer Protection and Safety Division, Safety and Reliability Branch (SRB) evaluated the waiver application, examined pipeline records, and conducted field inspections to analyze the deviation's impact on public safety. Some of the factors considered for this application are the age and manufacturing process of the pipe, construction processes used, and operating and maintenance history. In addition, the SRB reviewed and analyzed hydrostatic test pressure and welding records, and conducted a field trip to examine the type and condition of the pipe coating.

PG&E has another gas transmission line, Line 002 (L-002) that is adjacent to L-401 located in the same parcel. PG&E is not required to lower the pressure or replace a portion of L-002 in the Tracy parcel according to DOT regulations. However, due to its close proximity to the sports facility and L-401, the SRB also examined and analyzed the records of L-002 in order to evaluate its impact on public safety.

The evaluation of the waiver request followed guidelines established by DOT. The guidelines include some of the essential elements such as:

- Pipe Design and Construction records;
- Pressure Testing records;
- Environmental Considerations;
- Operational Considerations;
- Integrity Management Program; and
- Inspection and Enforcement History.

The SRB also analyzed PG&E's class location waiver risk assessment study. The study shows that significant risk reduction will be accomplished by performing a thorough engineering evaluation and verifying the integrity of both L-401 and L-002, as opposed to replacing the affected segment of L-401 in the Tracy parcel. The study also indicates that performing various threat mitigation techniques will provide a higher overall risk reduction than replacing the segment of the pipeline.

As a result of our investigation, the SRB determined that in lieu of compliance with 49 CFR § 192.611, PG&E's proposal of performing alternative risk control activities based on the principles and requirements of DOT regulation would not compromise the safety of the public, nor create additional risk. The SRB believes that an equal or greater level of safety would be achieved.

Therefore, the SRB is recommending the Commission grant the waiver to PG&E subject to the conditions and reporting requirements described below.

CONDITIONS

PG&E shall perform the following risk control, assessment, and mitigation activities on its transmission lines L-401 and L-002 in the waiver area in the city of Tracy:

1. PG&E is required to take the following protective measures during the construction of the sports facility in the Tracy Parcel:
 - a) Temporary protective fence will be installed around L-401 and L-002;
 - b) Daily surveillance of the lines will be performed;
 - c) Stand by inspections will be conducted for any construction in the Tracy parcel;
 - d) Warning signs which show PG&E's 24-hour phone number will be installed in the parcel to inform the public and the excavators of the presence of high pressure pipelines;
 - e) Public Safety Education will be provided to residents of Tracy and all excavators working at the site in the Tracy parcel.
2. PG&E is required to perform the following activities as long as the waiver is in effect for the pipeline segments between MPs 324 and 328 for L-401 and between MPs 138 and 142 for L-002 to ensure the safety of the public. Records should be generated clearly indicating date, person performing, area covered, abnormal conditions found, and remedial actions, if any.
 - a) Monthly ground patrol of the parcel (an aerial patrol is not acceptable);
 - b) Bi-monthly leak survey (foot survey) (a vegetation survey is not acceptable);
 - c) Bi-monthly pipe-to-soil potential readings; and
 - d) Bi-monthly rectifier voltage and amperage readings.
3. PG&E is required to conduct the following inspections to ensure the integrity of the pipelines:
 - a) High resolution Magnetic Flux Leakage In-line inspection of L-401 shall be performed in 2005 in the Tracy parcel and additional 110 miles of L-401 between MPs 317.93 and 428.06;
 - b) High resolution Magnetic Flux Leakage In-line inspection of L-002 will be performed in 2006 in the Tracy parcel and additional 26 miles of L-002;
 - c) All abnormal conditions found that suggest damage shall be investigated and remediated; and
 - d) Re-verification of the integrity of L-401 and L-002 shall be done by subsequent in-line inspections at intervals not exceeding 7 years in accordance with 49 CFR 192 Subpart O requirements.
4. External Corrosion Direct Assessment (ECDA): PG&E shall perform an ECDA survey for L-401 located between MPs 324 and 328, and for L-002 located between MPs 138 and 142. PG&E shall provide a schedule for the

four-step process with projected completion dates of each step. As a result of the direct assessments, all abnormal conditions found that suggest damage in the ECDA regions shall be investigated and remediated.

5. PG&E shall identify and mitigate potential threats to pipeline integrity and use the threat identification in its integrity program for L-401 and L-002 in the waiver area, as required in 49 CFR, Subpart O, § 192.917. PG&E shall report to the SRB any pipeline integrity threats, such as internal corrosion, third party damage, outside force damage or human error, which are detected by any means.

REPORTING REQUIREMENTS

1. PG&E shall immediately report any outside force contact with L-401 or L-002 in the Tracy parcel as long as the waiver is in effect even if it does not meet reportable incident criteria.
2. PG&E shall report the following on a quarterly basis until the construction of the sports facility is completed:
 - a) Monthly ground patrol records,
 - b) Bi-monthly leak survey records,
 - c) Bi-monthly pipe-to-soil potential readings, and
 - d) Bi-monthly rectifier voltage and amperage readings.
3. PG&E shall submit a schedule of all activities listed below for L-401 and L-002 within 3 months following approval of the class location waiver.
 - a) In-line inspection schedule, highlighting all activities with projected completion dates;
 - b) ECDA schedule, highlighting projected completion dates of each ECDA step;
 - c) Describe the economic impact to the company that results from the waiver, include both the cost avoided from not replacing the pipe as well as the added costs and benefits of the inspection program; and
 - d) Describe the benefit to the public in terms of energy availability, avoided disruptions that would have been required for pipe replacement, and the benefit of maintaining system capacity.
 - e) Any future filings with the Commission involving L-401 or L-002 shall be reported to the SRB.
4. PG&E will submit an annual report at the end of every calendar year for minimum of 5 years after the waiver is granted, documenting the following items listed below:

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- a) The results of any in-line inspection and ECDA performed within the inspection area containing the waiver location during the previous year;
- b) Any new integrity threats identified within the inspection area containing the waiver location, and any mitigation and remedial actions planned and performed during the previous year;
- c) Any encroachment in the inspection area including the waiver location including the number of new residences or gathering areas.;
- d) Any reportable and non-reportable incidents associated with the inspection area containing the waiver location that occurred during the previous year;
- e) Any leaks on the pipeline in the inspection area containing the waiver location that occurred during the previous year;
- f) List of all repairs on the pipeline in the inspection area containing the waiver location made during the previous year;
- g) On-going damage prevention initiatives on the pipeline in the inspection area containing the waiver location and a discussion on its success; and
- h) Any mergers, acquisitions, transfers of assets, or other events affecting the regulatory responsibility of the company operating the pipeline to which the waiver applies;
- i) Any filings with the Commission involving L-401 or L-002 occurred during the previous year.

COMMENTS

This is an uncontested matter in which the decision grants the requested relief. Therefore, pursuant to Public Utilities Code § 311(g)(2), the otherwise applicable 30-day period for public review and comment is being waived.

FINDINGS

1. The SRB recommends that this waiver request be granted, contingent on safety measures proposed by the SRB as described herein.
2. Furthermore, the granting of the waiver applies only to this specific request and should not be interpreted as applicable to any other location on PG&E's pipeline system.
3. Through our participation in the US DOT Pipeline Safety Program, the Commission may waive Federal Safety Regulations only with the concurrence of the US DOT. Thus Commission's approval is required before the US DOT will consider the waiver.

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December 16, 2004

THEREFORE, IT IS ORDERED THAT:

1. PG&E be granted a waiver from 49 CFR, § 192.611 for its segment of L-401, located in the city of Tracy between MPs 325.44 and 326.35.
2. PG&E shall conduct the integrity management and risk mitigation activities recommended by the SRB as detailed herein.
3. PG&E shall report to the SRB on the items, and in the manner and time frames advanced by the SRB herein.
4. This resolution shall be effective immediately; however, concurrence by the US DOT must also be obtained. The effective date of the waiver will be the date the US DOT issues concurrence.

I hereby certify that this Resolution was adopted by the California Public Utilities Commission at its regular meeting on December 16, 2004. The following Commissioners approved it:

Stephen Larson
Executive Director